

Cohort and Period Fertility: Aiming for Consistent Projections

Josh Goldstein
UC Berkeley
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Presentation for TPAM

Agenda

- How period and cohort fertility are related
- Historical experience
- The future, according to SSA
- Improving consistency?

How period and cohort can differ systematically

Example: each cohort sums to 100%, with a shift to older motherhood.

The result: period total fertility dips until postponement ends

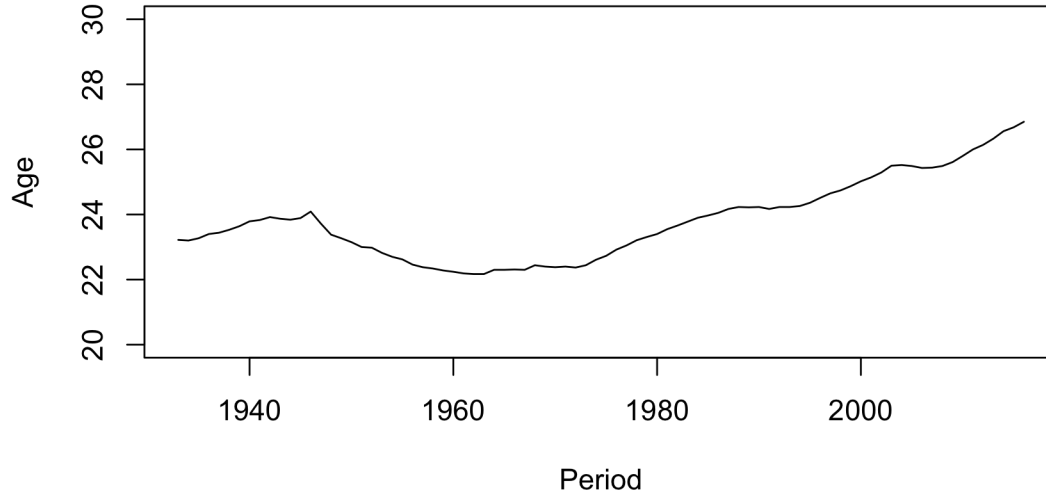
| Period | 0 | 1 | 2 | 3 | 4 | 5 |
|-----------------------|------|------|------|------|------|------|
| Older (> 30) | 50 % | 50 % | 52 % | 54 % | 56 % | 56 % |
| Younger (≤ 30) | 50 % | 48 % | 46 % | 44 % | 44 % | 44 % |
| Period Total | 100 | 98 | 98 | 98 | 100 | 100 |

Period total depressed

Recovery

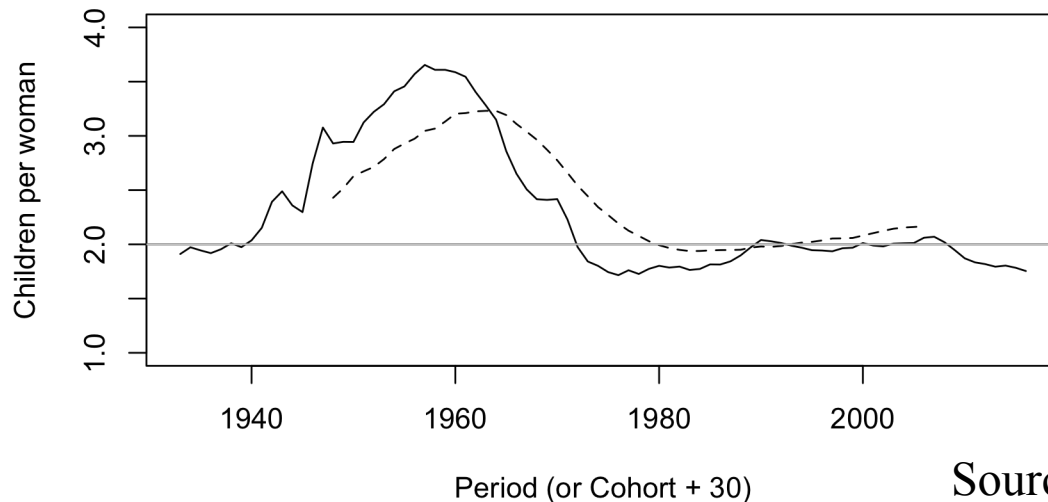
Historical Experience

Mean age of 1st birth schedule



- Postponement for last 50 years

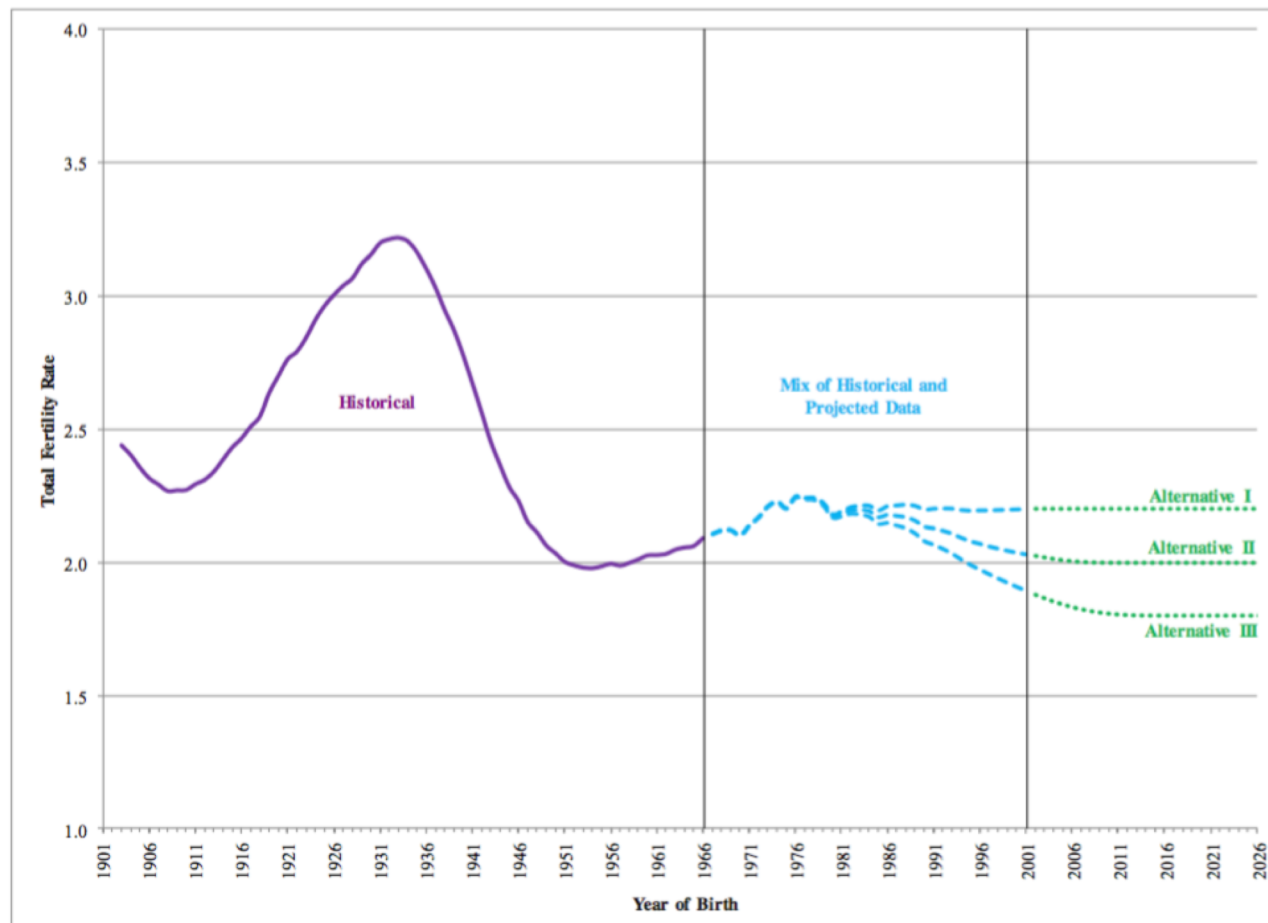
Period and Cohort Total Fertility (up to age 40)



- Depresses period TFR
- Current difference about 0.2 children

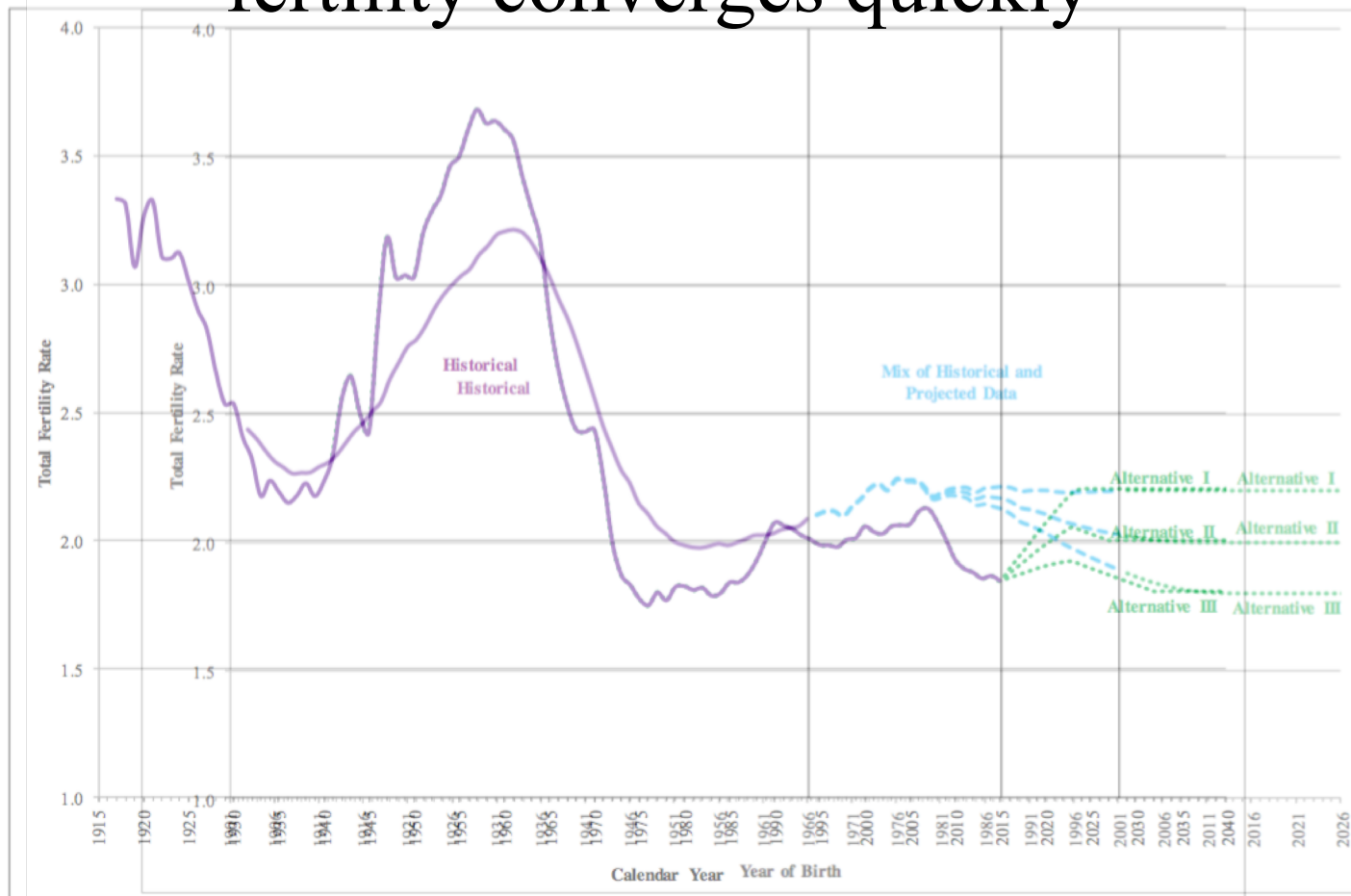
Source: HFD

SSA's future projection, for cohort fertility



Social Security Administration
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July 13, 2017

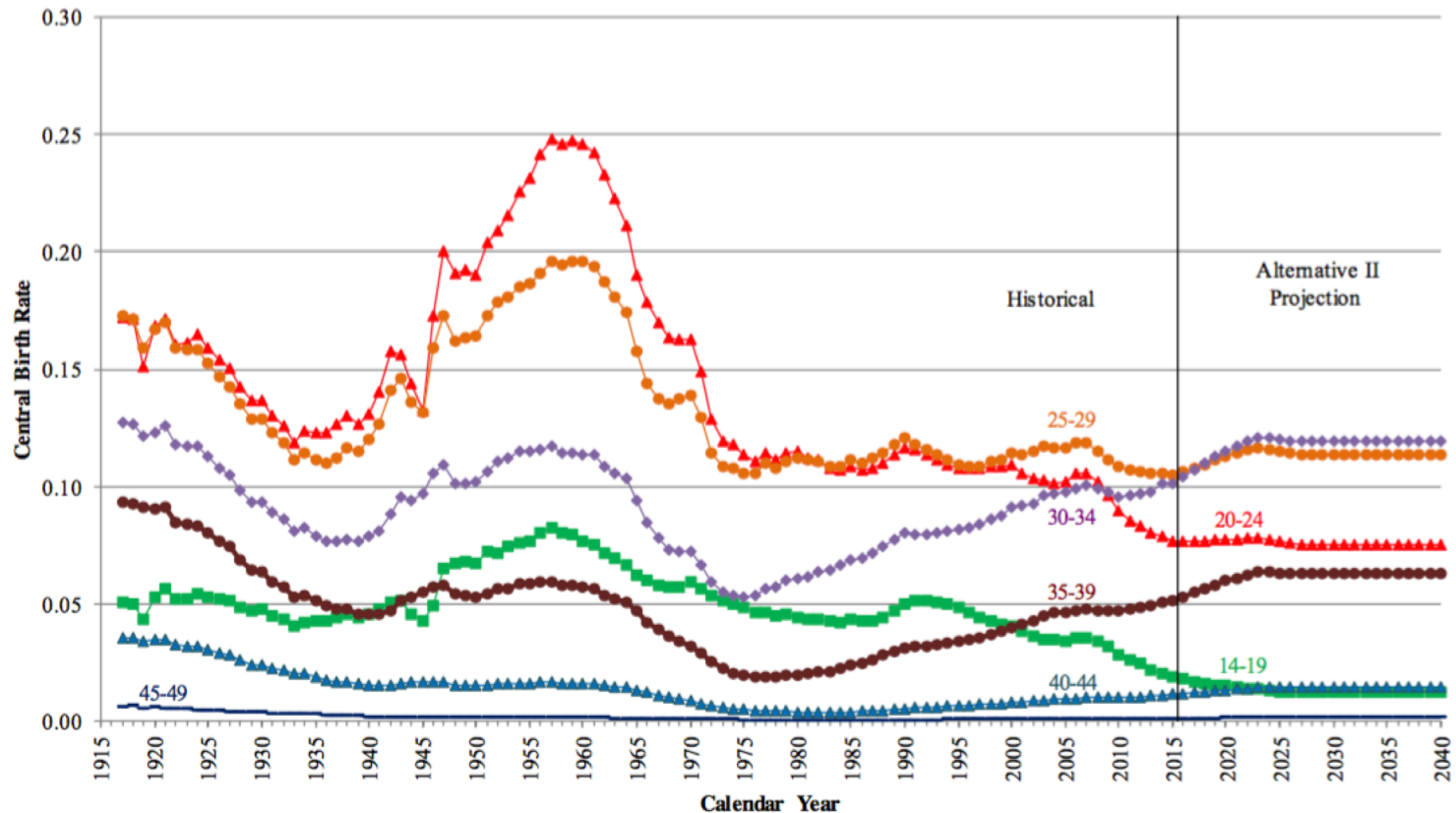
SSA projection assumes period and cohort fertility converges quickly



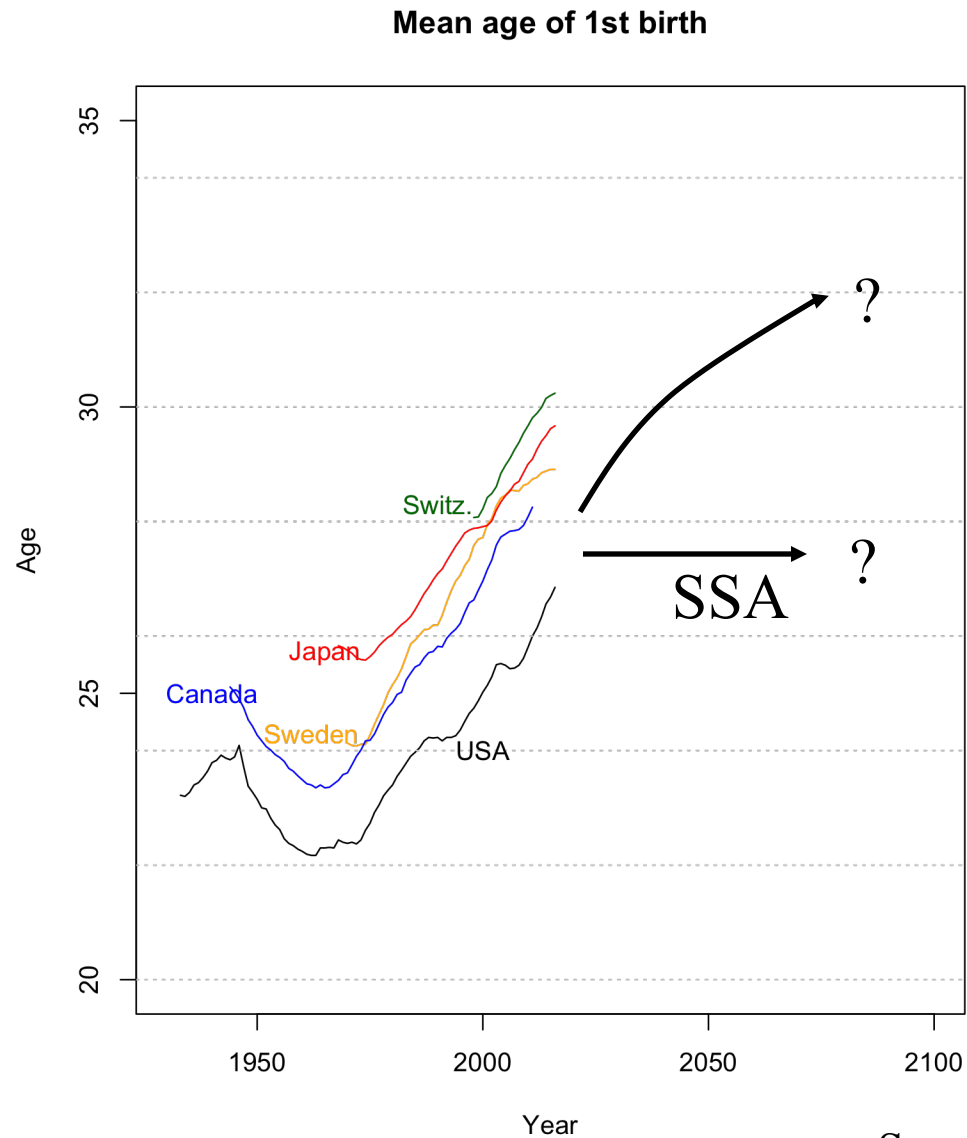
Social Security Administration
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The future, according to SSA (1)

Chart 1.2: Central Birth Rates for Five Year Age Groups: Historical and Alternative II Projection



Is further postponement likely



Source: HFD

Consistency:

- SSA assumes fall in cohort TFR, but no postponement (seems inconsistent)
- Alternatives:
 - Cohort TFR stays same (2.2), but there is more or less continuous postponement. PTFR \rightarrow 2.0
 - Cohort TFR falls (2.0?), and there is continuous postponement PTFR \rightarrow 1.8 to 1.9

Conclusion

- My opinion is that SSA should consider incorporating postponement into the "rationale" for the fertility assumptions
- Doesn't necessarily change assumptions (Can still project $PTFR = 2.0$ if $CTFR$ stays high)
- But need to lower $PTFR$ if they really think $CTFR$ will fall